

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

June 12, 2009

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National
Monument Research Permit to Dr. Isabella Abbott, University of Hawaii, Department of Botany,
for Access to State Waters to Conduct Algal Research Activities

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument research permit to Dr. Isabella Abbott, Professor of Botany, University of Hawaii, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The research permit, as described below, would allow entry and activities to occur in the Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island
- Necker Island
- French Frigate Shoals
- Gardner Pinnacles
- Maro Reef
- Laysan Island
- Lisianski Island
- Pearl and Hermes Atoll
- Kure Atoll State Seabird Sanctuary

The activities covered under this permit would occur from June 1, 2009 through October 31, 2009.

The proposed activities are a renewal of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES

The applicant proposes to collect limited amounts of crustose coralline algae specimens for examination and identification. As crustose coralline species in the northern portion of the

Hawaiian Archipelago are not the same in zonation or dominance as they are in the south, specimens collected within the Monument would be identified and compared with species in the Main Hawaiian Islands and elsewhere.

The applicant's field team, of 3-4 people, would travel to the Monument aboard the NOAA Ship HI'IALAKAI for approximately 30 days. The islands and atolls visited would depend on the ship's cruise schedule. The collection of algae would be conducted in various marine habitat from low intertidal to 100 ft depth, and would focus on crustose coralline species found in coralline algal reefs, as well as incidental non-coralline macroalgae species. Crustose coralline algae specimens would be hand collected by researchers with a chisel. Up to 5 specimens, in 2x2cm pieces, per species would be collected at each dive site, for a maximum of 500 specimens total. They would be stored in bags or buckets, transported to the ship and preserved in formaldehyde or ethanol, frozen, or dried according to the Monument's storage and transport protocol. Preliminary identification would occur in the field, with follow up work to be conducted at the Department of Botany, University of Hawaii at Manoa.

The proposed project would lead to a better understanding of the substrata types around the older Hawaiian Islands.

The activities proposed by the applicant directly support the Monument Management Plan's priority management needs 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.1 – Marine Conservation Science).

The activities described above may require the following regulated activities to occur in State waters:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving monument resource
- ☒ Touching coral, living or dead
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 11th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Comments received from the scientific community are summarized as follows:

Scientific reviews support the acceptance of this application. No concerns were raised.

Comments received from the Native Hawaiian community are summarized as follows:

Cultural reviews support the acceptance of this application. No concerns were raised.

Additional reviews and permit history:

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐

If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐

If so, please summarize past permits:

- The applicant was granted permits PMNM-2007-030 and PMNM-2008-051 to conduct similar work in 2007 and 2008.

Have there been any a) violations: Yes ☐ No ☒
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

STAFF OPINION:

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for her application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with the following special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Research Permit General Conditions. The following special conditions have been vetted through the legal counsel of the Co-Trustee agencies.

1. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
2. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.
3. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.

4. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
5. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge
6. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.


MONUMENT MANAGEMENT BOARD OPINION:

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

RECOMMENDATION:

“That the Board authorize and approve, with stated conditions, a Research Permit to Dr. Isabella Abbott, University of Hawaii, Department of Botany.”

Respectfully submitted,



DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL



LAURA H. THIELEN
Chairperson

Papahānaumokuākea Marine National Monument
RESEARCH Permit Application

NOTE: *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator

6600 Kalaniana'ole Hwy. # 300

Honolulu, HI 96825

nwhipermit@noaa.gov

PHONE: (808) 397-2660 FAX: (808) 397-2662

SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.

Papahānaumokuākea Marine National Monument Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information

Applicant Name: Dr. Isabella A. Abbott

Affiliation: UH Manoa

Permit Category: Research

Proposed Activity Dates: June 1- October 1, 2009

Proposed Method of Entry (Vessel/Plane): NOAA ship Hi'ialakai

Proposed Locations: TBD

Estimated number of individuals (including Applicant) to be covered under this permit:

3

Estimated number of days in the Monument: 30

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

Include collections of algae focused on crustose coralline species found in coralline algal reefs, and incidental non-coralline macroalgae species

b.) To accomplish this activity we would

Examine and sample substrata from low intertidal to 100 ft depth (fewer CCA beyond this)

c.) This activity would help the Monument by ...

Understanding the underpinnings (substrata types) around the older Hawaiian Islands

Other information or background: ecologically, Crustose Coralline Algae are calcifying organisms that are important for building reef structure and preventing reef erosion, as well as a preferred recruitment substrate for settling coral larvae. The species found in the NWHI are expected to change with the temperature gradient from the main Hawaiian Islands northward. Understanding the species composition of these foundation plants will offer further insight into the ecology of the reefs in the monument.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Abbott, Isabella A

Title: Professor Emerita, UH Manoa

1a. Intended field Principal Investigator (See instructions for more information):

Katherine Cullison

2. Mailing address (street/P.O. box, city, state, country, zip):

[REDACTED]

Phone:

[REDACTED]

Fax:

[REDACTED]

Email:

[REDACTED]

For students, major professor's name, telephone and email address:

3. Affiliation (institution/agency/organization directly related to the proposed project):

UH Manoa and Bishop Museum

4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Research Diver; Jane Doe, Field Technician):

Katherine Cullison, Research Diver/Field PI

Jeffrey Kuwabara, research Diver

Section B: Project Information

5a. Project location(s):

<input checked="" type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Maro Reef			
<input checked="" type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Lisianski Island, Neva Shoal	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Midway Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Other			

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:

Various Intertidal and subtidal benthos at reefs visited by HI'IALAKAI cruise

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- ☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☐ Anchoring a vessel
- ☐ Deserting a vessel aground, at anchor, or adrift
- ☐ Discharging or depositing any material or matter into the Monument
- ☒ Touching coral, living or dead
- ☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- ☐ Attracting any living Monument resource
- ☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- ☐ Subsistence fishing (State waters only)
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6 Purpose/Need/Scope *State purpose of proposed activities:*

To collect limited samples of crustose coralline algae for examination and identification to species, for the purpose of comparison to the Main Hawaiian Islands and to determine the biogeographic distribution of species in the archipelago. Algal specimens will be collected and assigned preliminary IDs in the field. Follow up work will be conducted at the Department of Botany, University of Hawaii at Manoa.

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?
Samples taken will be as small as possible, with an attempt to minimize duplications at any site.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?
The proposed sampling is not expected to have any impact on monument resources or ecological integrity. The algae will recover quickly from the sampling, which will have negligible effect on the ecosystem's health.

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.
There is no alternative, since the goal of the research is to identify CCA species in the NWHI national monument. NWHI CCA species appear to be different in species or forms from those encountered in the main HI islands, and little is known about their distribution in the archipelago.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?
It is not expected that the CCA collection will have any adverse impacts. The small bare patches of substrate exposed by collecting will provide a bare space for either regrowth of the CCA or settlement by another local benthic organism. The value of the research is significant, as there is no information on the CCA species present in the monument. CCAs rival live corals for their rate of calcification in reef habitats, making them an important builder and stabilizer of reef structure.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.
Collections will be made as quickly and efficiently as possible, while attempting to minimize the need to repeat collections in the same locations.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

I am an algal taxonomist with 60+ years of experience. The conduct of this activity will require no mitigation.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct. NOAA has sponsored this assesment of crustose coralline algae species in the monument. No mitigation is expected.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

Collections methods employed will involve minimum short-term and no long term impacts on Monument resources. We strive to diminish any related ecological effects both with our SCUBA techniques and our sampling strategy.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?

Yes (NOAA Ship Hi'ialakai)

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

This study and its methods will have no negative effect on any monument resource, but will lead to a greater understanding of the ecology of its ecosystems.

8. Procedures/Methods:

CCAs will be hand collected by researchers on SCUBA using a chisel in 2x2cm pieces. CCA will be stored in bags or buckets, transported to the ship and preserved either by fixing in formaldehyde or ethanol, freezing, or drying. We will attempt to collect only a small sample per site that is representative of the diversity present at each site. No archaeological activities will be involved

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:

Crustose Coralline Algae

Scientific name:

Various genera of corallinaceae, ex. Lithophyllum

& size of specimens:

approx. 5) 2x2cm samples per species per site

Collection location:

Various marine habitat from intertidal to 100 ft deep.

☐ Whole Organism ☒ Partial Organism

9b. What will be done with the specimens after the project has ended?

Deposited in Bishop Museum, Honolulu; and US Nat. Museum Herbarium

9c. Will the organisms be kept alive after collection? ☐ Yes ☒ No

• General site/location for collections:

Laboratory in St. John, UH Manoa

• Is it an open or closed system? ☐ Open ☐ Closed

N/A

• Is there an outfall? ☐ Yes ☐ No

N/A

• Will these organisms be housed with other organisms? If so, what are the other organisms?

N/A

• Will organisms be released?

N/A

10. If applicable, how will the collected samples or specimens be transported out of the Monument?

Preserved in Ethanol or Formalin, or dried

11. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:

Duplicative sampling may be done unintentionally, since CCA species in the field are often indistinguishable.

12a. List all specialized gear and materials to be used in this activity:

SCUBA

12b. List all Hazardous Materials you propose to take to and use within the Monument:

Formaldehyde 37%

13. Describe any fixed installations and instrumentation proposed to be set in the Monument:

None

14. Provide a time line for sample analysis, data analysis, write-up and publication of information:

Final Collections: Summer 2009

Species Identification and composition data finished by Jan 2010.

15. List all Applicants' publications directly related to the proposed project:

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

Signature

Date

SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?

- ☐ Applicant CV/Resume/Biography
- ☐ Intended field Principal Investigator CV/Resume/Biography
- ☐ Electronic and Hard Copy of Application with Signature
- ☐ Statement of information you wish to be kept confidential
- ☐ Material Safety Data Sheets for Hazardous Materials

Papahānaumokuākea Marine National Monument Compliance Information Sheet

1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant): Katherine Cullison; Field PI and diver. 2nd research diver to be determined, Possibilities include John Coney (UH Hilo), Kevin Flanagan (UH Manoa), Andrew Purves (UH Manoa), Walter Dudley (UH Hilo), One Diver, TBD

2. Specific Site Location(s): (Attach copies of specific collection locations): Necker, Maro, Lisianski, Kure, Midway, and Laysan. There are no specific sites we require, but every attempt will be made to sample a diverse set of habitats, depths, and location with respect to water movement (fore-reef, back-reef, lagoon, reef crest). Depths will be 100 feet or less.

3. Other permits (list and attach documentation of all other related Federal or State permits): N/A

3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation.

4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information): Project is funded by NOAA. Second diver will be a volunteer.

5. Time frame:

Activity start: June 2007

Activity completion: June 2010

Dates actively inside the Monument:

From: September 21, 2009

To: October 21, 2009

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

Personnel schedule in the Monument: All divers on the project will dive at the following locations:

9/19/09	Necker
9/20/09	Necker
9/21/09	Necker
9/22/09	Transit
9/23/09	Maro
9/24/09	Maro
9/25/09	Maro
9/26/09	Maro
9/27/09	Maro
9/28/09	Transit
9/29/09	Lisianski
9/30/09	Lisianski
10/1/09	Transit
10/2/09	Midway
10/3/09	Midway
10/4/09	Midway
10/5/09	Midway
10/6/09	Midway
10/7/09	Midway
10/8/09	Midway
10/9/09	Kure
10/10/09	Kure
10/11/09	Kure
10/12/09	Kure
10/13/09	Kure
10/14/09	Kure
10/15/09	Midway
10/16/09	Transit
10/17/09	Laysan

6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument: Personnel will be covered either as UH employee or volunteer.

7. Check the appropriate box to indicate how personnel will enter the Monument:

X ☐ Vessel
☐ Aircraft

Provide Vessel and Aircraft information: NOAA ship Hi'ialakai

8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):

- ☐ Rodent free, Date:
- ☐ Tender vessel, Date:
- ☐ Ballast water, Date:
- ☐ Gear/equipment, Date:
- ☐ Hull inspection, Date:

9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):

Vessel name:

Vessel owner:

Captain's name:

IMO#:

Vessel ID#:

Flag:

Vessel type:

Call sign:

Embarkation port:

Last port vessel will have been at prior to this embarkation:

Length:

Gross tonnage:

Total ballast water capacity volume (m3):

Total number of ballast water tanks on ship:

Total fuel capacity:

Total number of fuel tanks on ship:

Marine Sanitation Device:

Type:

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

VMS Email:
Inmarsat ID#:

* Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 203-2503 or (808) 203-2500.

* PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.

10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

Additional Information for Land Based Operations

11. Proposed movement of personnel, gear, materials, and, if applicable, samples:
N/A

12. Room and board requirements on island: N/A

13. Work space needs: N/A

DID YOU INCLUDE THESE?

- ☐ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits